

# VASCULAR ACCESS DEVICE CARE AND MAINTENANCE

For all acronyms, refer to the Definitions & Abbreviations section of the IH Adult Parenteral Practices Manual

## VAD PATENCY MAINTENANCE SCHEDULE

\*Patency Assessment: examination of insertion site; aspiration for blood return (PVADs,& CVADS  $\geq$  4Fr.); ability to infuse/flush without resistance, and the presence/absence of pain

\***Note:** Community Care client/family is not expected to aspirate for blood return.

Continuous Infusions	Intermittent Access/Infusions:	Minimal Maintenance Frequencies
Administration set remains connected to VAD	Administration set is disconnected after scheduled treatments	i.e. Dormant VAD: VAD Not in use/not accessed for prolonged period of time (>12HOURS)
<p>*<b>Patency assessment &amp; flush:</b></p> <ul style="list-style-type: none"> <li>Once per shift/home visit and prn;</li> <li>Prior to and following each access;</li> <li>Change of continuous administration set;</li> <li>Change of any add-on devices;</li> <li>When retrograde blood observed</li> </ul> <p><b>Additional Flush:</b></p> <ul style="list-style-type: none"> <li>Between each medication, &amp; incompatible infusates, &amp; after transfusion.</li> </ul>	<p>*<b>Patency assessment: followed by flush and lock:</b></p> <ul style="list-style-type: none"> <li>On conversion from continuous to intermittent access;</li> <li>Per minimal maintenance frequency and prn;</li> <li>Prior to and following each access;</li> <li>Prior to and following each medication/infusion;</li> <li>Change of any add-on devices.</li> </ul> <p><b>Note:</b> IVADS: All of above, &amp; also following insertion/change of non-coring needle.</p>	<p>*<b>Patency assessment:, followed by flush and lock:</b></p> <ul style="list-style-type: none"> <li><b>PVAD-short</b> – with injection cap Q12H and PRN; with EPPV (community &amp; residential care) Q24H and PRN</li> <li><b>PVAD - midline (EPPV attached)</b> – Q7DAYS and PRN</li> <li><b>CVAD – non-tunelled percutaneous (EPPV attached)</b> – Q24hours and PRN</li> <li><b>PICC (EPPV attached)</b> - Q7DAYS and PRN</li> <li><b>CVAD – tunelled percutaneous (EPPV attached)–</b> Q7DAYS and PRN</li> <li><b>Implanted (IVAD)</b> – Q7DAYS &amp;PRN if non-coring needle &amp;EPPV attached; Q30DAYS if no needle attached</li> <li><b>Intraosseous</b> – not applicable as must be removed within 24HOURS of initiation.</li> </ul>

## VAD CARE

VENOUS ACCESS DEVICE	Turbulent Flush	Chemical Lock Heparin <b>100 units/mL</b>	Dressing/Securement Device & Access Port Change (i.e.EPPV or injections cap)	Site/Needle Change	Administration Set change	Solution Bag change
<input type="checkbox"/> PVAD : <b>Peripheral Short</b>	2 to 5 mL 0.9%NaCl in 3 to 12 mL syringe	Not routinely required	Change access port, TSM & securement device with site change and PRN	Q72 to 96H (per facility protocols) and PRN	<b>IF Continuously Connected to VAD, change tubing:</b>	<b>Acute Care:</b> Change bag at least Q24H & PRN
<input type="checkbox"/> PVAD: <b>Peripheral Midline</b>	10 to 20 mL 0.9% NaCl in a 10 to 12 mL syringe  <b>Exception:</b> Following blood sample collection or transfusion of blood products & parenteral nutrition, flush with 20mL of 0.9% NaCl in 10 to 12 mL syringes.	<b>Open Ended VAD</b> 3 mL of Heparin <b>100 units/mL</b> in a 10 to 12 mL syringe  <b>Closed Ended VAD</b> Not routinely required	<i>Transparent semi-permeable Membrane (TSM) Dressing</i> <ul style="list-style-type: none"> <li>Initial: Change within 24 HOURS</li> <li>Subsequent: Change Q7DAYS &amp; PRN</li> <li>Note: See specific careplan for alternate dressing schedules</li> </ul> <i>Securement Device</i> <ul style="list-style-type: none"> <li>Change Q7DAYS and PRN</li> </ul> <i>External Positive Pressure Valve (EPPV)</i> <ul style="list-style-type: none"> <li>Change Q7DAYS and PRN</li> <li>Change with blood collection &amp; after transfusions</li> </ul>	Review necessity of VAD regularly with prompt removal of unnecessary device.	<ul style="list-style-type: none"> <li>Q72 to 96H, (per facility protocols);</li> <li>with site changes;</li> <li>whenever sterility is compromised.</li> </ul> <b>Exceptions:</b> <ul style="list-style-type: none"> <li>Blood administration set – refer to IH Clinical Transfusion Practices manual;</li> <li>Parenteral Nutrition – change Q24HOURS</li> <li>Specific drug protocols, refer to IH Medication Manual (for Parenteral Therapy)</li> </ul>	<b>HCC:</b> Change bag with each administration set change & PRN  <b>Note:</b> Change with VAD site change, and when converting to a different type of VAD, i.e. PVAD to CVAD.  <b>Parenteral Nutrition:</b> Q24H and PRN <b>Medicated IV solutions</b> (premixed or compounded): According to expiration date in IH Medication Manual (for Parenteral Therapy).  <b>Note:</b> Initiate a new bag anytime medications are to be added. Medications should never be added to partial bags due to resulting inaccuracies of concentration/dose.
<input type="checkbox"/> CVAD: <b>Percutaneous non-tunneled</b>						
<input type="checkbox"/> CVAD: <b>PICC</b>						
<input type="checkbox"/> CVAD: <b>Tunneled percutaneous</b>						
<input type="checkbox"/> CVAD: <b>IVAD-</b>	As above <b>Exception applies</b>	5 mL of Heparin <b>100 units/mL</b> in a 10 to 12 mL syringe	When accessed with non-coring needle: EPPV, TSM & securement device change Q7DAYS & PRN (with each needle change)	Non-coring needle change Q7DAYS and PRN	<b>IF Intermittently Connected to VAD, change tubing:</b>	
<input type="checkbox"/> <b>Intraosseous</b>	As above <b>Exception applies</b>	Not recommended	Not routinely required	Remove within 24HOURS	<ul style="list-style-type: none"> <li>with each medication dose;</li> <li>with site changes; and,</li> <li>whenever sterility is compromised.</li> </ul> <b>Extension Tubing:</b> <ul style="list-style-type: none"> <li>Added at time of insertion, change with VAD site change</li> <li>Added after VAD insertion, change with administration set.</li> </ul>	